



US00D803724S

(12) **United States Design Patent**
Zhou

(10) **Patent No.:** **US D803,724 S**
(45) **Date of Patent:** **** Nov. 28, 2017**

(54) **AMPHIBIOUS UNMANNED VERTICAL TAKEOFF AND LANDING AIRCRAFT**

(74) *Attorney, Agent, or Firm* — Steven A. Nielsen;
www.NielsenPatents.com

(71) Applicant: **Dylan T X Zhou**, Tiburon, CA (US)

(57) **CLAIM**

(72) Inventor: **Dylan T X Zhou**, Tiburon, CA (US)

We claim the ornamental design for an amphibious unmanned vertical takeoff and landing aircraft, as shown and described.

(**) Term: **15 Years**

(21) Appl. No.: **29/578,694**

DESCRIPTION

(22) Filed: **Sep. 23, 2016**

Related U.S. Application Data

(63) Continuation-in-part of application No. 29/572,722, filed on Jul. 29, 2016, and a continuation of application No. 29/567,712, filed on Jun. 10, 2016, and a continuation-in-part of application No. 14/940,379, filed on Nov. 13, 2015, now Pat. No. 9,493,235, which is a continuation-in-part of
(Continued)

FIG. 1 is a top perspective view of an amphibious unmanned vertical takeoff and landing aircraft with wings folded upward;

(51) **LOC (10) Cl.** **12-07**

(52) **U.S. Cl.**
USPC **D12/16.1**; D12/324; D12/326

FIG. 2 is a top perspective view thereof, shown in an alternate configuration of use, with wings folded down;

(58) **Field of Classification Search**

USPC D12/16.1, 319, 323–345, 82, 88, 90, 91, D12/3, 4, 2; D21/436, 438, 439, 440, D21/441, 447, 448, 449, 450, 452, 453, D21/454, 455, 424, 533, 833
CPC B64C 1/062; B64C 39/024; B64C 27/08
See application file for complete search history.

FIG. 3 is a top perspective view thereof, with wings extended;

FIG. 4 is a top perspective view thereof, with extended wings folded upward;

FIG. 5 is a right side view thereof;

FIG. 6 is a left side view thereof;

FIG. 7 is a front view thereof;

FIG. 8 is a back view thereof;

FIG. 9 is a top view thereof;

FIG. 10 is a bottom view thereof;

FIG. 11 is a perspective view of an amphibious unmanned vertical takeoff and landing aircraft in FIG. 3, shown in an alternate configuration of use, with onboard parachutes deployed;

FIG. 12 is a top perspective view of the amphibious unmanned vertical takeoff and landing aircraft in FIG. 2, shown in an alternate configuration of use, with rotor blades folded;

FIG. 13 is a top perspective view thereof, shown in an alternate configuration of use, with rotor blades and wings folded;

FIG. 14 is a top perspective view, shown in an alternate configuration of use, with engines tilted partially upward; and,

FIG. 15 is a top perspective view thereof, with engines tilted fully vertical.

(56) **References Cited**

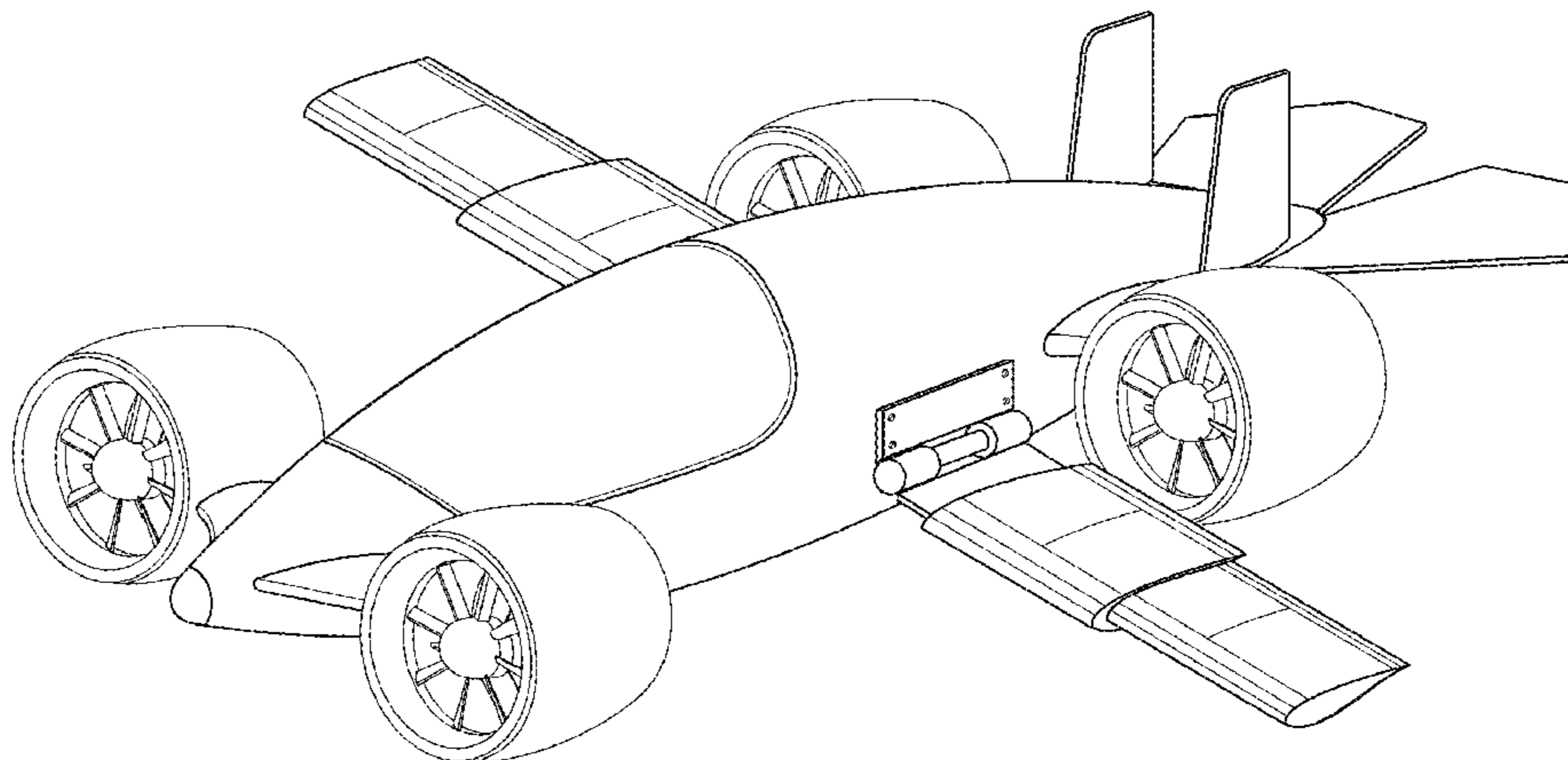
U.S. PATENT DOCUMENTS

D88,107 S * 10/1932 Fike 296/181.5
D95,247 S * 4/1935 Grummer D12/91
(Continued)

Primary Examiner — Robert M. Spear

Assistant Examiner — Marissa J Cash

(Continued)



The broken lines of FIG. 12 illustrate environmental factors only and form no part of the claimed design.

1 Claim, 15 Drawing Sheets

Related U.S. Application Data

application No. 14/034,509, filed on Sep. 23, 2013, now Pat. No. 9,510,277.

(56)

References Cited

U.S. PATENT DOCUMENTS

D99,156 S * 3/1936 Covey D12/91
 D100,186 S * 6/1936 Fitzmaurice D12/91
 2,156,288 A * 5/1939 Holliday B64C 37/00
 180/7.4
 D139,636 S * 12/1944 Walker 296/181.5
 2,562,491 A * 7/1951 Hall B64C 37/00
 244/2
 2,562,492 A * 7/1951 Hall B64C 37/00
 200/43.08
 2,619,184 A * 11/1952 Hall B64C 37/00
 180/54.1
 5,915,649 A * 6/1999 Head B64C 37/00
 244/17.17
 D424,981 S * 5/2000 Cook D12/91
 6,086,014 A * 7/2000 Bragg, Jr. B60F 5/02
 244/2
 D545,925 S * 7/2007 Milner D21/533
 D547,238 S * 7/2007 Milner D12/88

D610,950 S * 3/2010 Helfet D12/91
 7,938,358 B2 * 5/2011 Dietrich B64C 37/00
 244/2
 8,152,096 B2 * 4/2012 Smith B64C 29/0033
 244/12.4
 D684,503 S * 6/2013 Cook D12/92
 8,720,814 B2 * 5/2014 Smith B64C 29/0033
 244/12.4
 8,973,861 B2 * 3/2015 Zhou A63H 27/12
 244/17.23
 D736,140 S * 8/2015 Moller D12/326
 9,099,902 B2 * 8/2015 Chen H02K 5/225
 9,139,299 B2 * 9/2015 Lundgren B64C 37/00
 2003/0094536 A1 * 5/2003 LaBiche B60F 5/02
 244/2
 2004/0245374 A1 * 12/2004 Morgan B64C 29/0025
 244/12.3
 2008/0142643 A1 * 6/2008 Yoeli B60V 1/06
 244/23 R
 2010/0294877 A1 * 11/2010 Jianu B64C 29/0025
 244/2
 2013/0112804 A1 * 5/2013 Zhu B64C 29/0025
 244/2
 2015/0028150 A1 * 1/2015 Klein B64C 3/385
 244/2
 2015/0102155 A1 * 4/2015 Krastev B60K 16/00
 244/2
 2015/0314867 A1 * 11/2015 Razroev B64C 29/0033
 244/119
 2016/0001879 A1 * 1/2016 Johannesson B64C 27/50
 416/142
 2016/0243910 A1 * 8/2016 Hu B60F 5/02
 2016/0272314 A1 * 9/2016 Radu B64C 37/00
 2017/0072755 A1 * 3/2017 Zhou B64C 29/0075

* cited by examiner

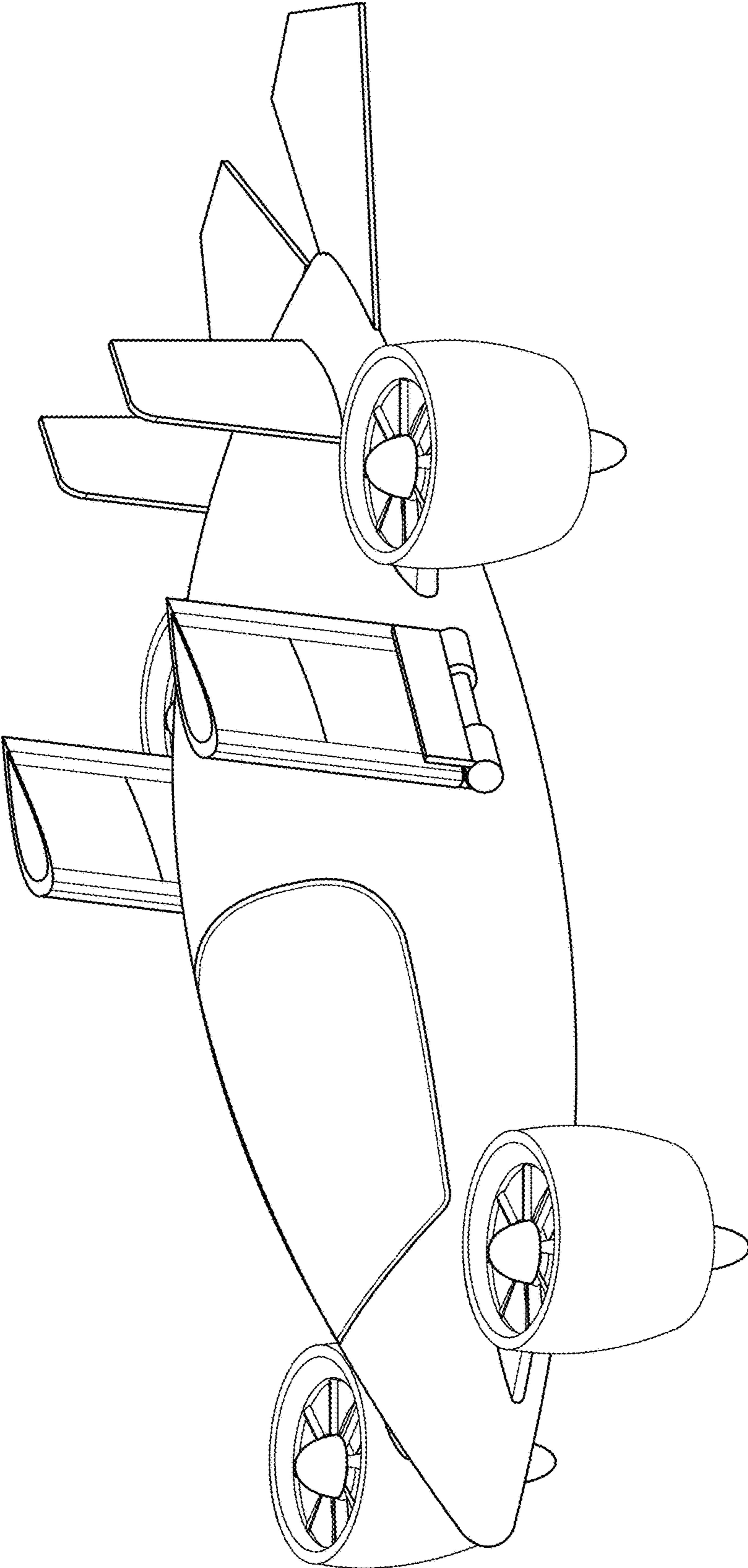
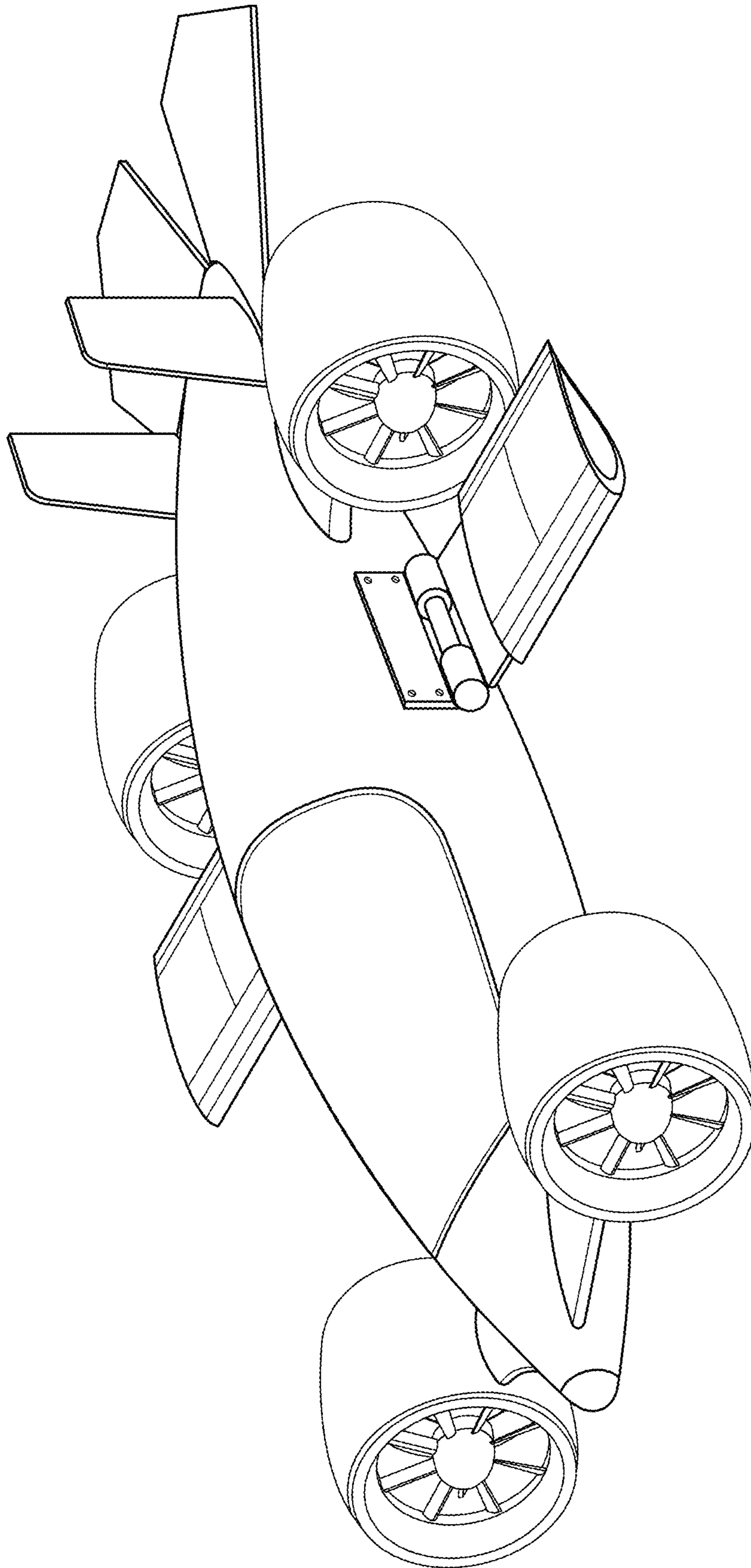


FIG. 1

FIG. 2



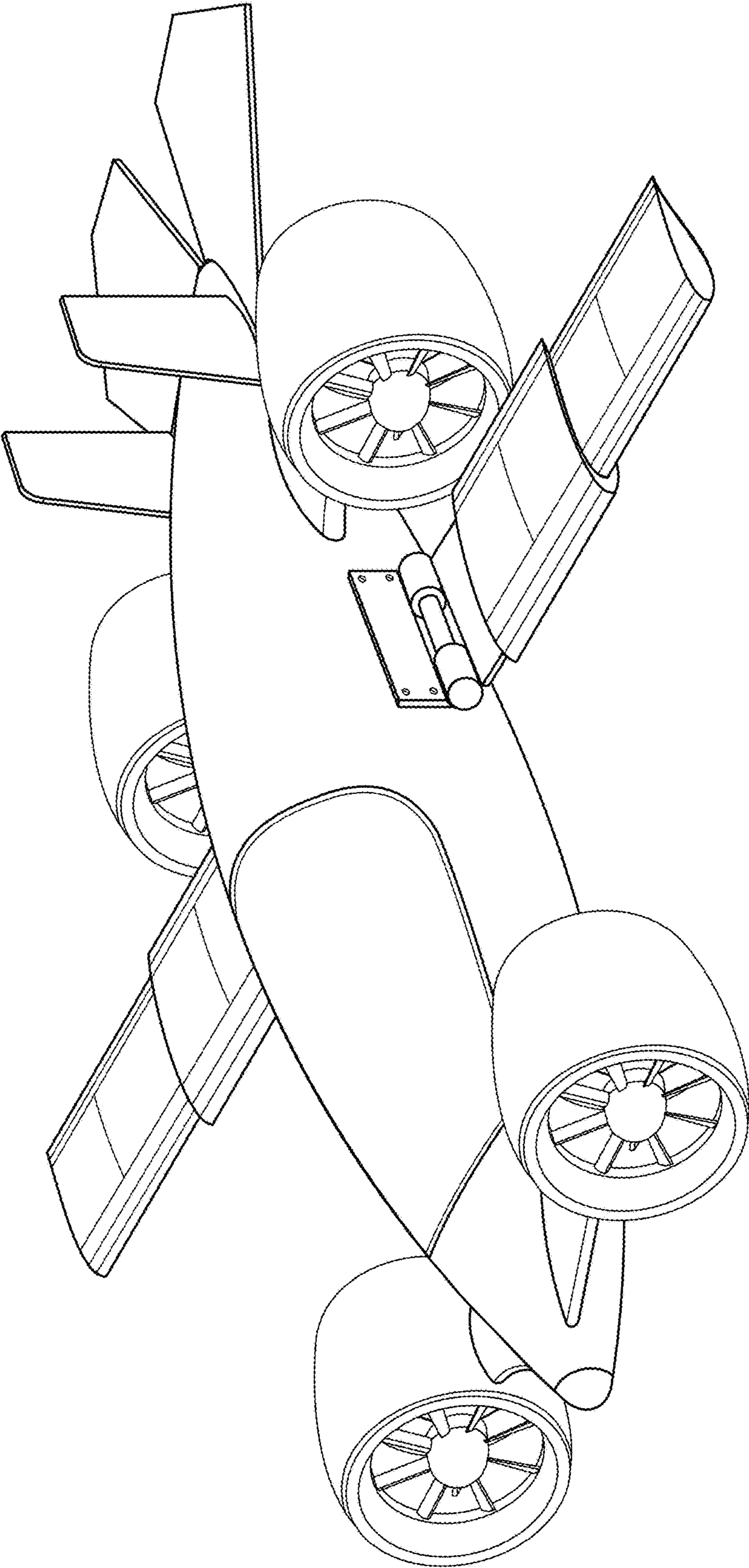


FIG. 3

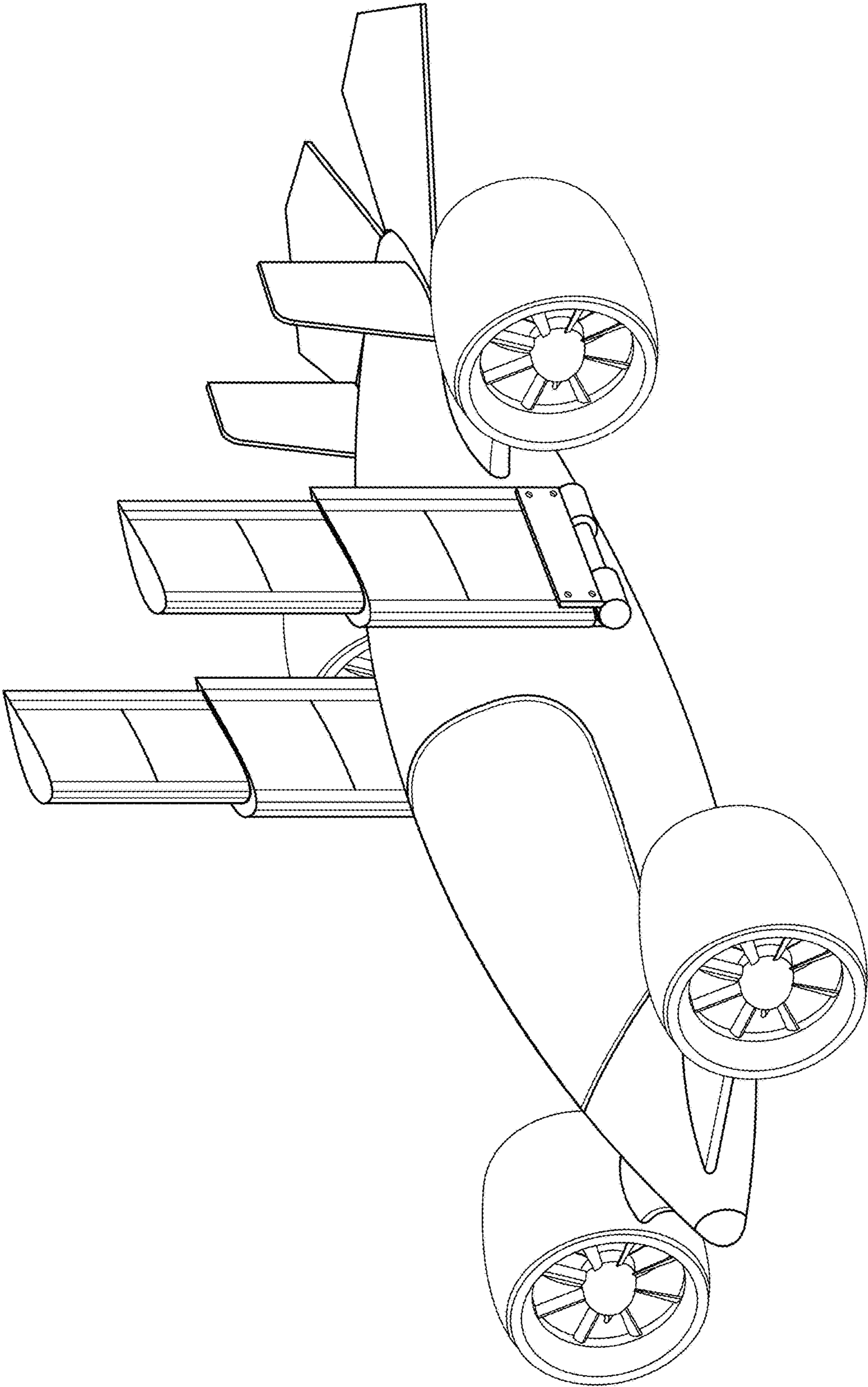


FIG. 4

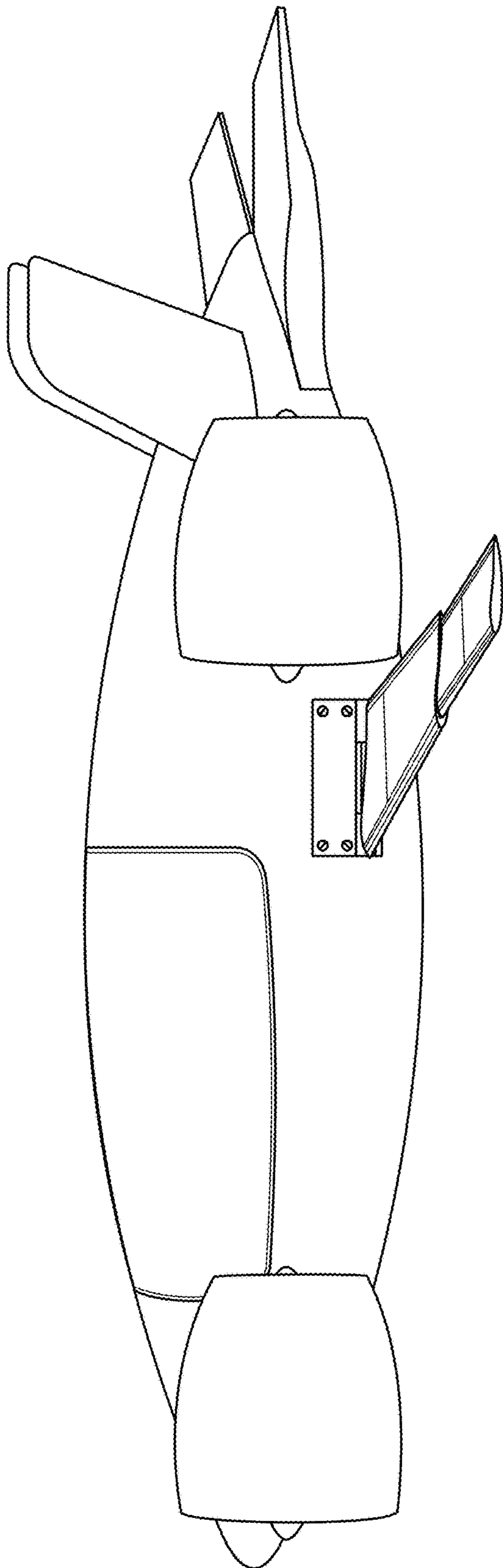


FIG. 5

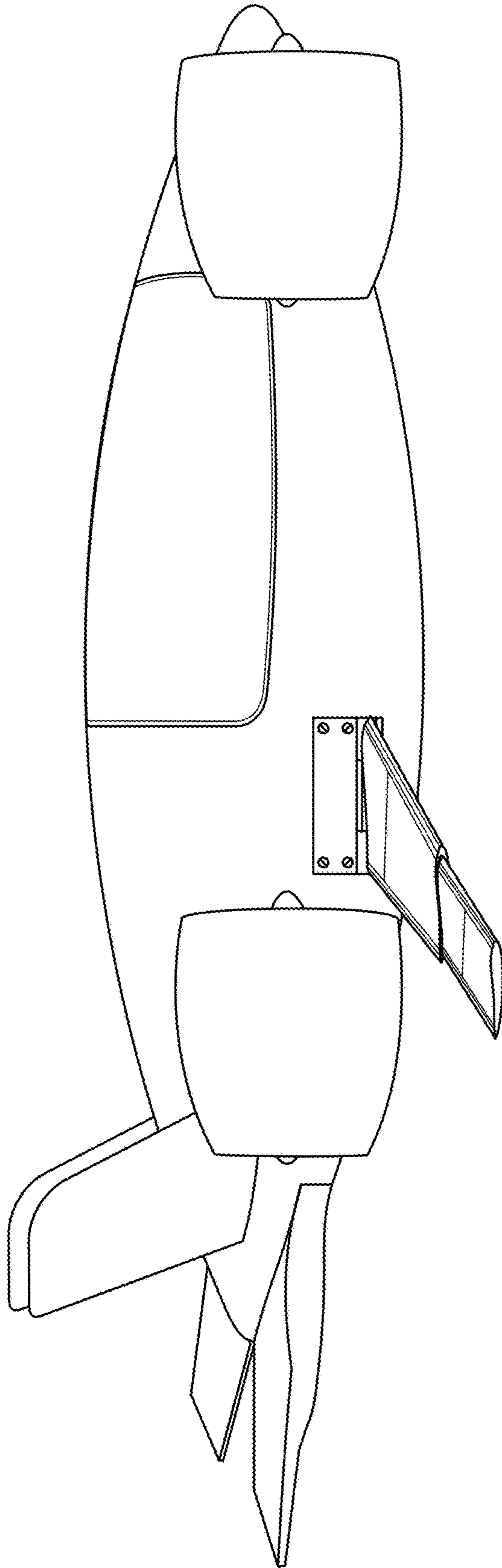
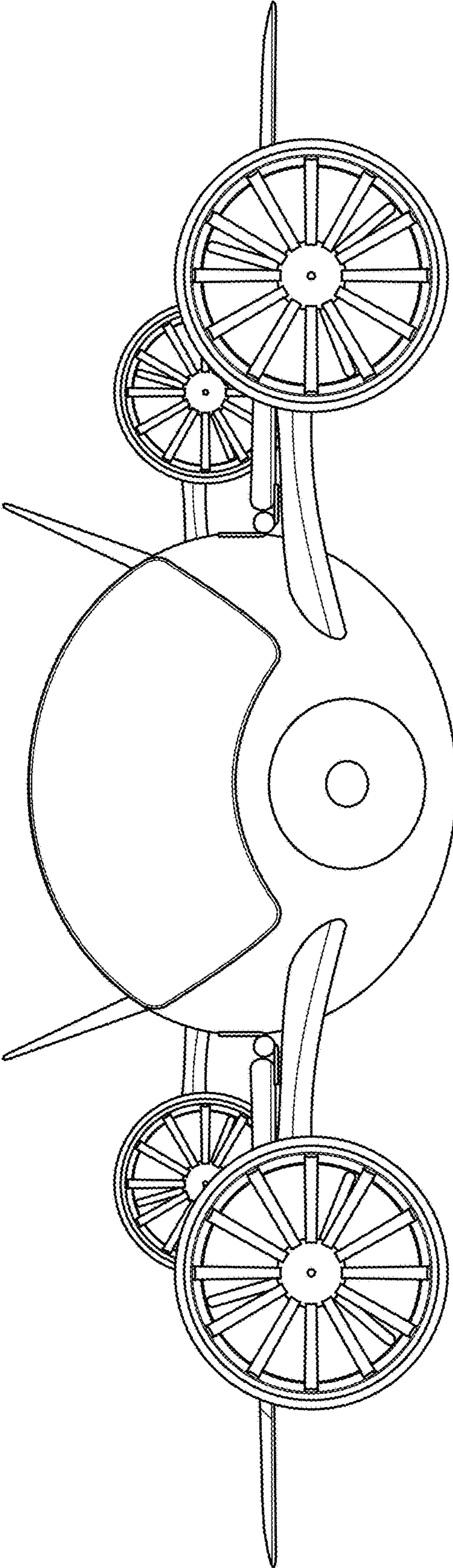


FIG. 6

FIG. 7



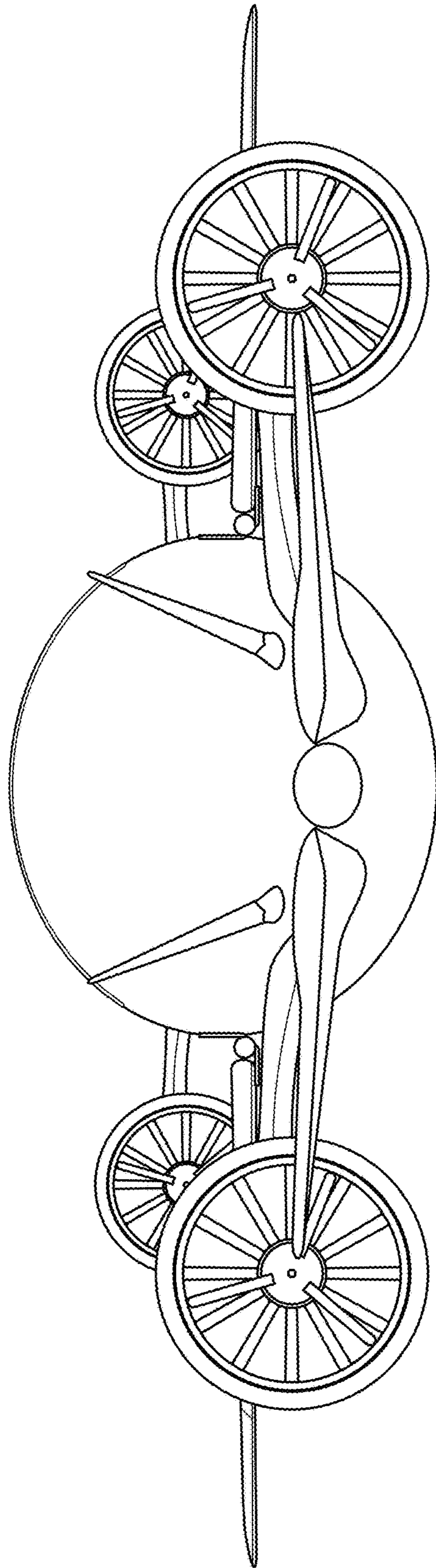


FIG. 8

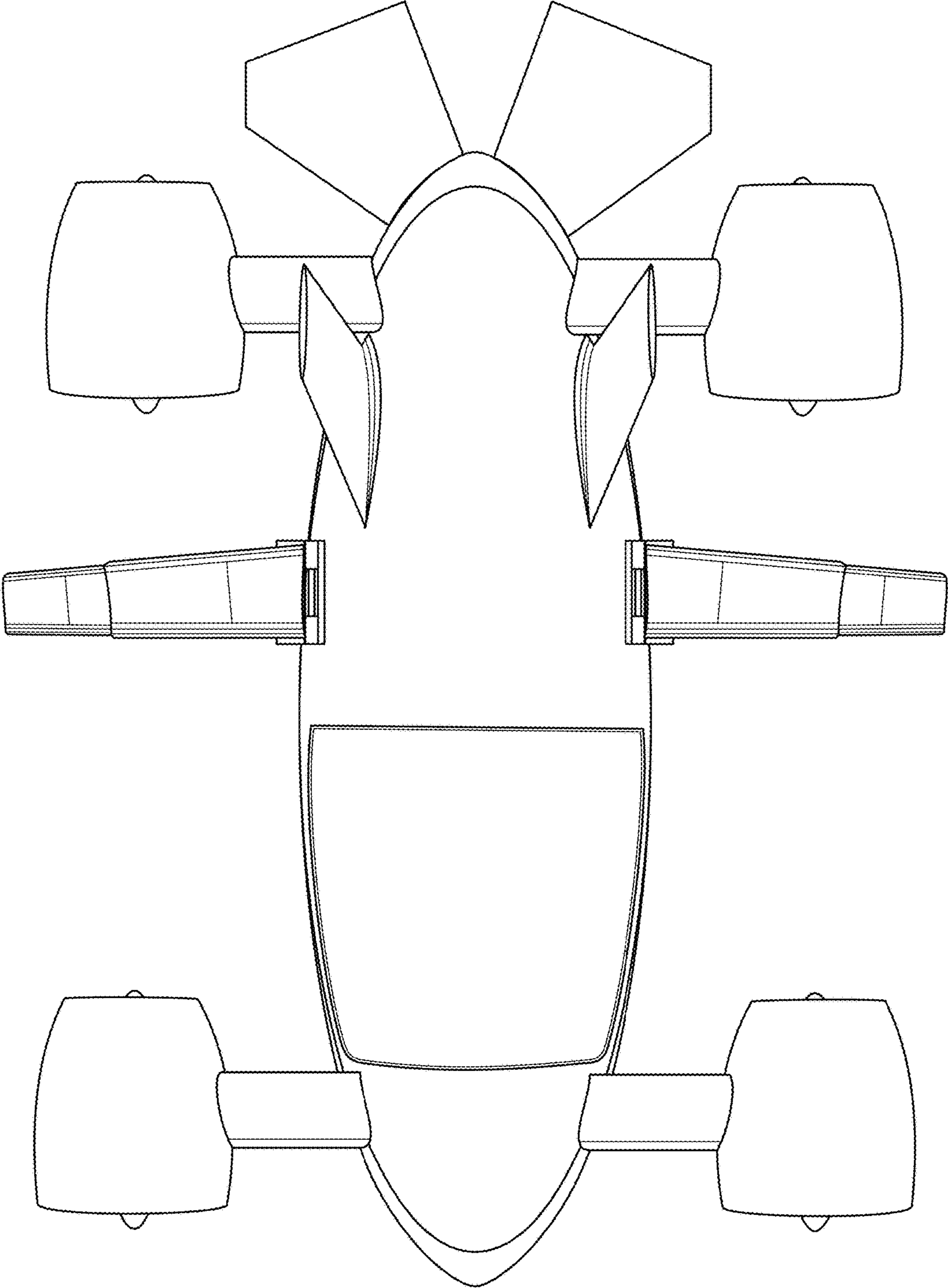


FIG. 9

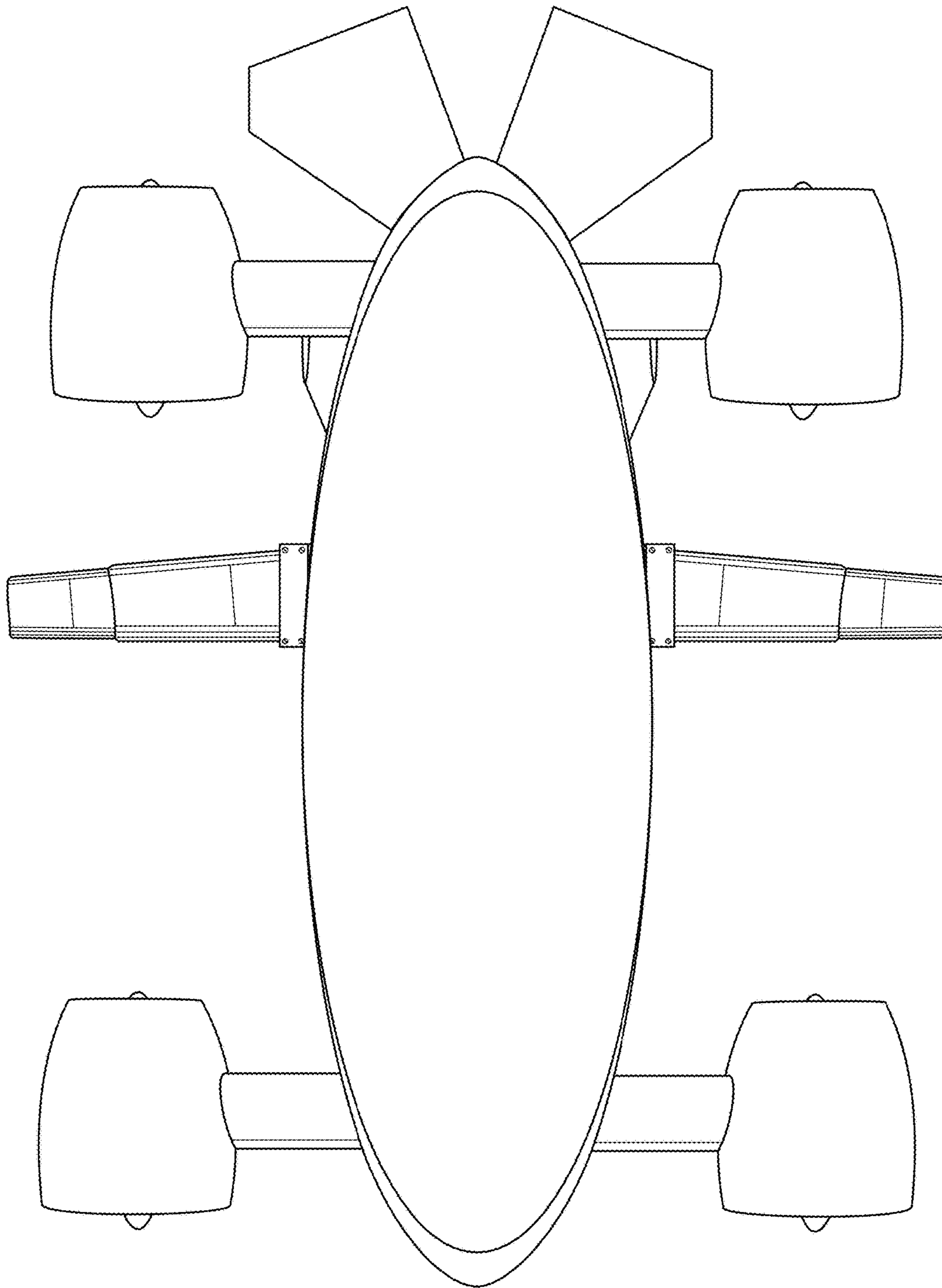


FIG. 10

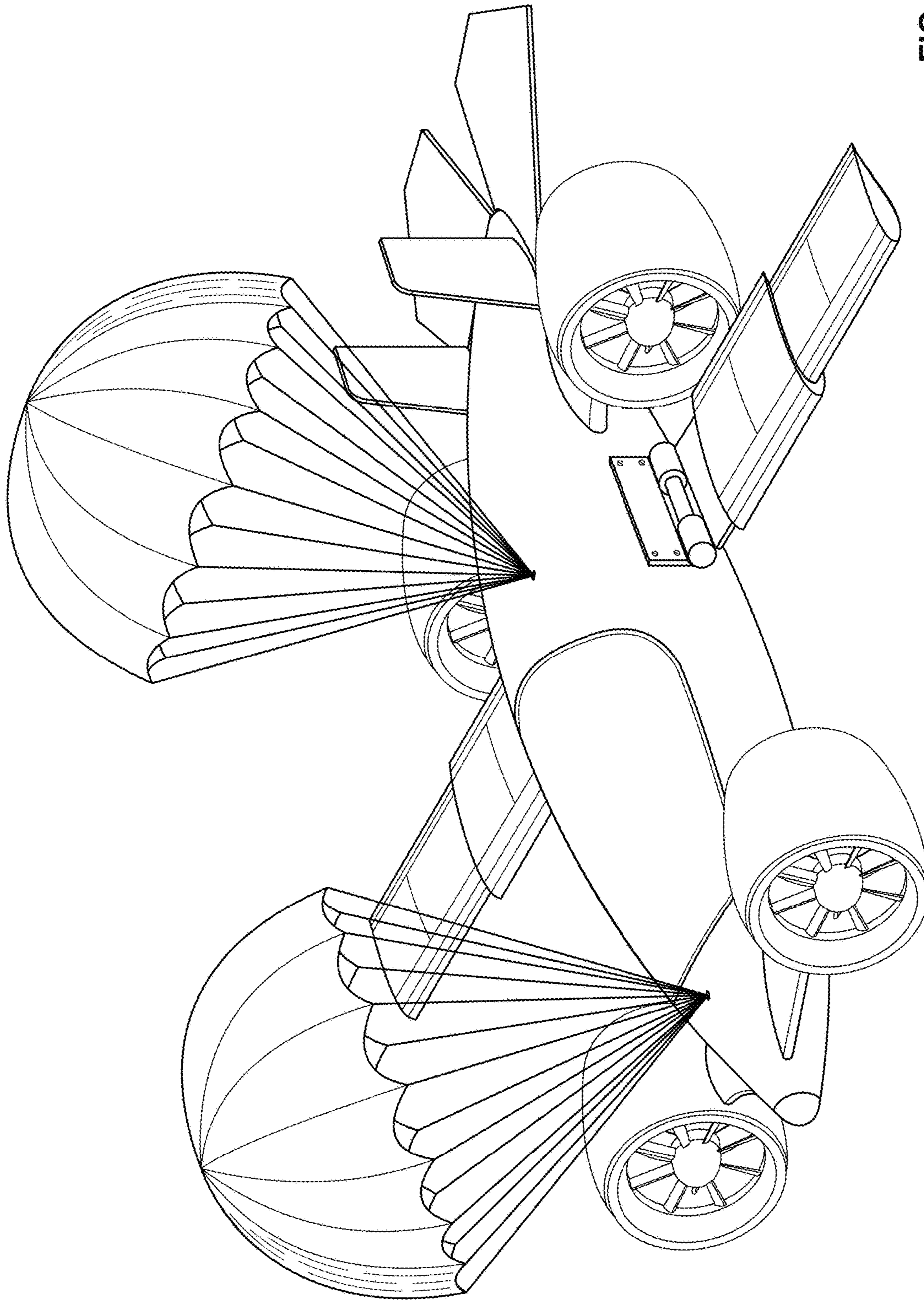


FIG. 11

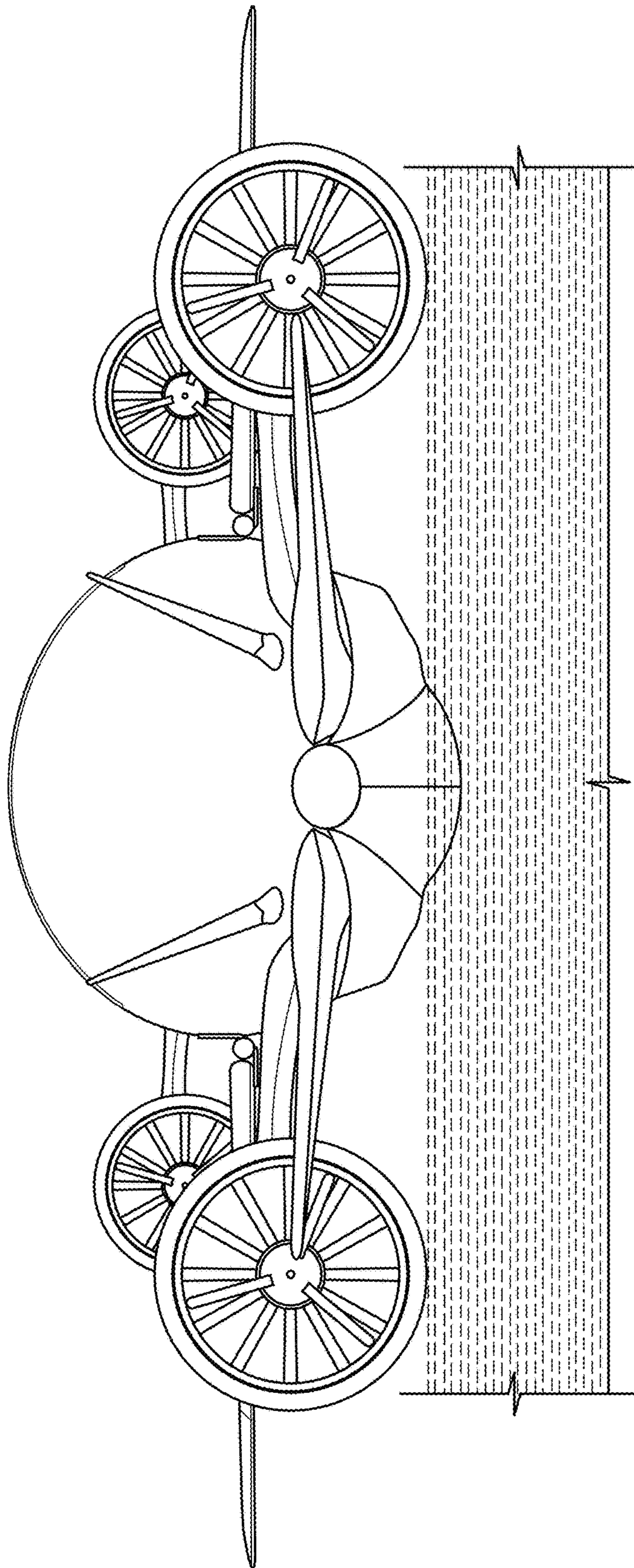
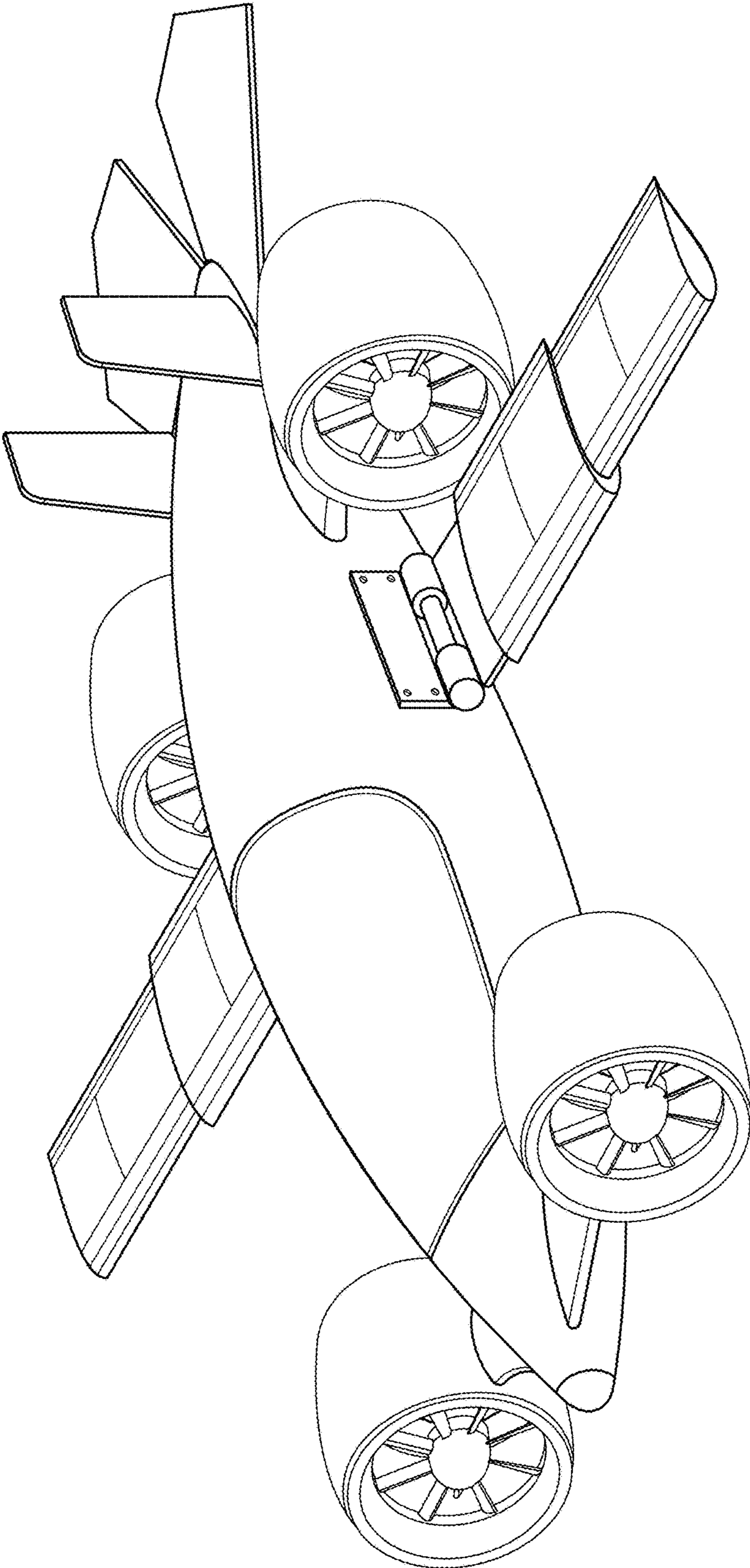


FIG. 12

FIG. 13



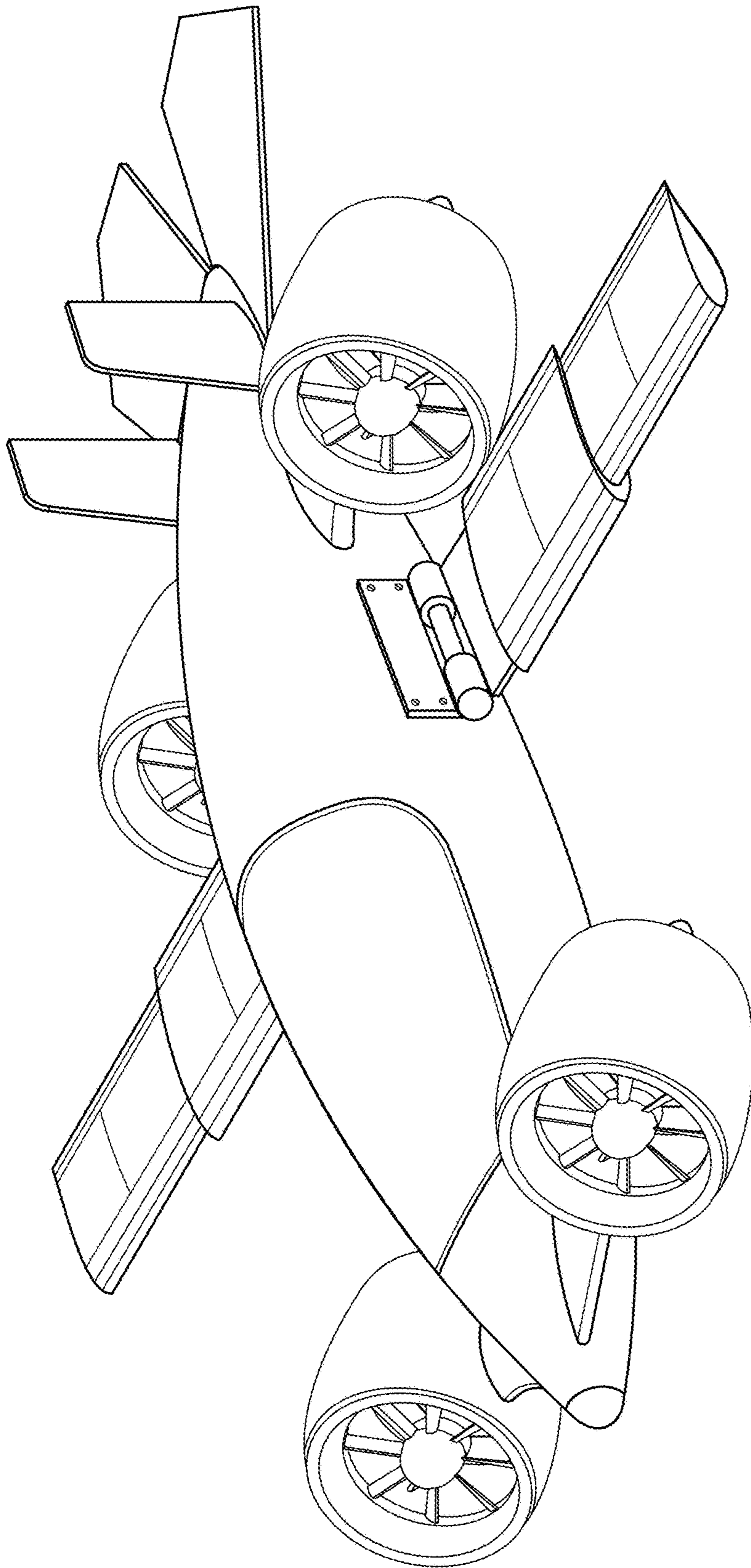


FIG. 14

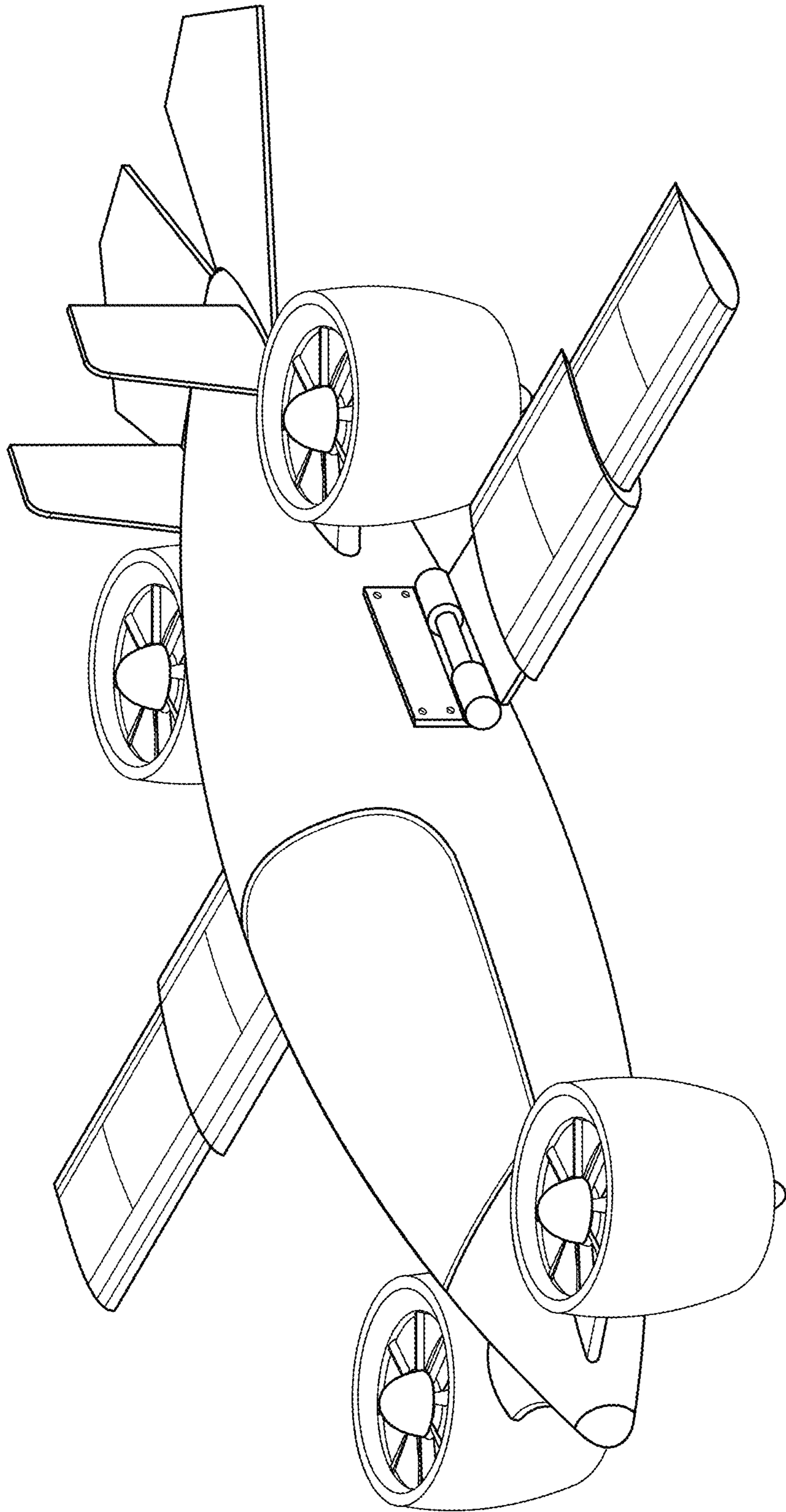


FIG. 15